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A New Genus and Species of Sciaridæ (Diptera, Nematocera) from South Africa.

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With 3 Text-figures.

The species described below was mentioned in passing in my account of the Mycetophilidæ of Patagonia and South Chile (Freeman, **1951** : 10). Two further specimens have now been sent to me by Mr. B. R. Stuckenberg (Natal Museum) collected by his wife on *Erica* flowers in West Cape Province and I am taking advantage of this to describe the genus and species both of which appear to be new.

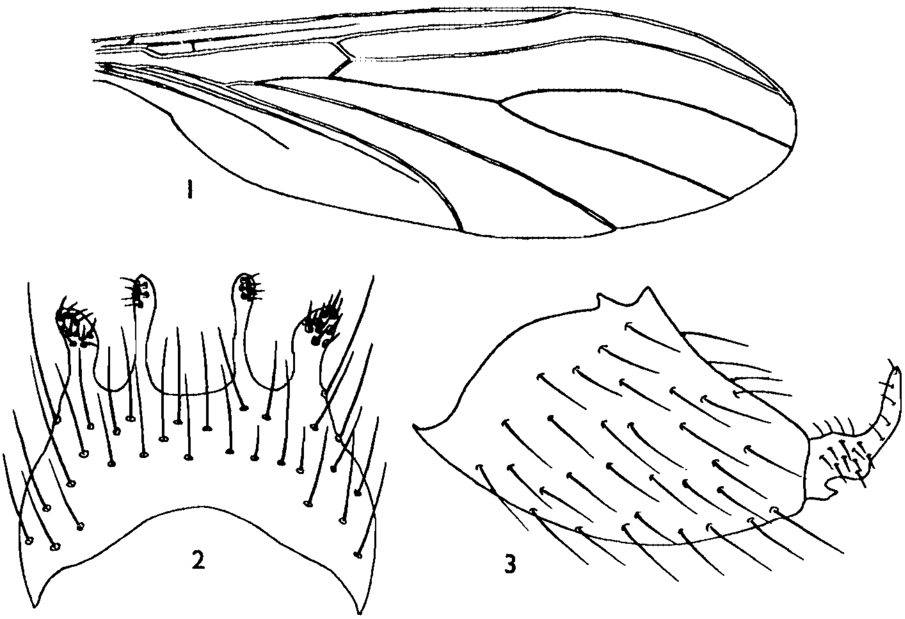
The new genus appears to be closely related to *Heterotricha* Meunier which it resembles in general structure and venation. *Heterotricha* was described originally from an amber fossil but recent species have been described from South Africa, South America and New Zealand. Its exact systematic position is in some doubt ; it has variously been placed in the Sciaridæ and Mycetophilidæ subfamily Diadocidiinæ. Both *Heterotricha* and the new genus possess a mid-pleural pit on the thorax and if this is used as a criterion, they fall into the Sciaridæ where *Heterotricha* has usually been placed in recent years. However the absence of definite eye bridges and the rather different venation leave the matter open and it is possible that both genera would be better placed in a separate subfamily of the Mycetophilidæ. The venation is similar to that of the Mycetophilid genus *Pterogymnus* Freeman from southern South America, except for the absence of R_3. A study of the early stages might well show the affinities of all three genera more clearly, but it is not likely that larvæ will be at all easily obtained.

It is convenient to state here that the South African species *Heterotricha relicta* Edwards differs from both South American species and from *Rhynchoheterotricha* gen. nov. in the presence of bristles on pteropleuron and in the short eye bridges ; it could be considered as belonging to a separate genus. The New Zealand species probably resembles the South American ones but I have seen no specimens.

Rhynchoheterotricha nov. gen.

Eyes slightly emarginate, no traces of eye bridges, sparsely pubescent ; ocelli three in number, placed close together on slight prominence, outer ones about two diameters from eyes ; antennæ with segments elongate and cylindrical, basal flagellar segment perhaps eight times as long as wide ; lower part of face or clypeus greatly elongated to form a proboscis as long as front tibia, the mouthparts, including maxillary palpi carried at apex. Postnotum and pteropleuron bare, mid-pleural pit present. Coxites fairly long, tibial spines about equal in length to diameter of tibiæ. Wings with venation (text-fig. 1) almost identical to that of *Heterotricha* Meunier, but wing membrane quite bare of macrotrichia ; all long veins carry macrotrichia. Hypopygium not unlike *Heterotricha* but IXth tergite with two pairs of processes.

TEXT-FIGS. 1–3.



Rhynchoheterotricha stuckenbergæ. (1) Wing ; (2) IXth tergite of male ; (3) coxite and style in lateral aspect.

Type and only known species : *Rhynchoheterotricha stuckenbergæ* n. sp.

This genus shows great similarity to South American species of *Heterotricha* in venation and general appearance but is easily separated by the absence of macrotrichia on the wing membrane and by the elongated proboscis ; the IXth tergite of the male is also more complex. The proboscis is interesting because it is not the mouthparts themselves that are elongated but a part of the head and the mouthparts are carried at the apex. In this character it resembles *Gnoriste* Meigen ; all other genera with elongated proboscis that I have examined in the Sciaridæ and Mycetophilidæ have the mouthparts themselves elongated (*Rhynchoplatyura* Meigen, *Antlemon* Haliday, *Asindulum* Latreille, *Lygistorrhina* Skuse, *Eugnoriste* Coquillett).

Rhynchoheterotricha stuckenbergæ n. sp.

A blackish species with plain wings and yellowish legs, readily recognized by the long proboscis, bare wings and by the venation ; only the male is known.

Male.—Wing length 3–4 mm.

Head black, characters as for genus, antennæ closely covered with short whitish pubescence. *Thorax* blackish with pruinosity marking off three scutal stripes, hairs pale. *Legs* yellowish brown. *Wings* (text-fig. 1) unmarked, macrotrichia absent from membrane, microtrichia well formed, halteres either yellow or with brown knobs. *Abdomen* blackish, hypopygium (text-figs. 2–3) with small styles ; IXth tergite bearing four slightly clavate processes, each carrying black spines on the lower face.

Holotype male and 1 ♂ paratype on flowers of *Erica* spp. WEST CAPE PROVINCE : Du Toits Kloof, Paarl District, 27.ix.59 (*P. J. Stuckenberg*). Further paratype, CAPE PROVINCE : Worcester, 1 ♂, ix.1928 (*R. E. Turner*). Holotype returned to Natal Museum, other two specimens in British Museum (Nat. Hist.).

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